

Remarks

Claims 23-25, 27-31, and 34 are currently pending in this application, with claim 35 being canceled by and claim 34 being amended by this Amendment After Final.

The Office Action rejected claims 23-25 and 27-29 under 35 U.S.C. § 103(a) as being unpatentable over Deleonibus (U.S. Patent No. 6,091,076) in view of Koh (U.S. Patent No. 6,049,110); rejected claims 23-25 and 27-31 under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi et al. (U.S. Patent No. 5,341,028) in view of Imai (U.S. Patent No. 6,297,529) and Koh; rejected claim 34 under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi et al. in view of Gardner et al. (U.S. Patent No. 6,096,615) and Koh; rejected claim 35 under 35 U.S.C. § 103(a) as being unpatentable over Yamaguchi et al. in view of Gardner et al. and Koh, and further in view of Imai; rejected claim 34 under 35 U.S.C. § 103(a) as being unpatentable over Deleonibus in view of Gardner et al. and Koh; and rejected claim 35 under 35 U.S.C. § 103(a) as being unpatentable over Deleonibus in view of Gardner et al. and Koh, and further in view of Imai.

By this Amendment, Applicants have incorporated canceled claim 35 into independent claim 34.

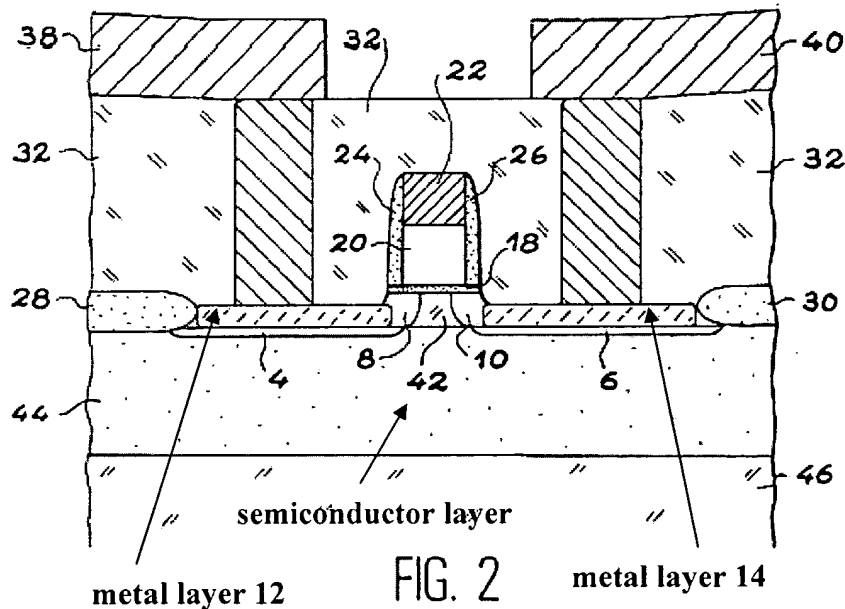
The present invention recited in, for example, claim 23, and claims 24, 25, and 27-31 at least by virtue of dependence, comprises a combination of elements, including a metal layer formed at least in the exposed portion of the extension region, the metal layer contacting the semiconductor layer and the exposed portion of the extension region.

The present invention recited in, for example, claim 34, comprises a combination of elements, including a conductor formed at least in the exposed portion of the extension region, the conductor being in contact with the exposed portion of the extension region, and at least a portion of

the source diffusion region to form a Schottky diode, and the body region.

The Response to Arguments section of the Office Action fails to show where the references disclose either a metal layer formed at least in the exposed portion of the extension region, the metal layer contacting the semiconductor layer; or a conductor formed at least in the exposed portion of the extension region, the conductor being in contact with the body region. That is because none of the references disclose these claimed features, as shown below, and the claims should be allowed for at least this reason.

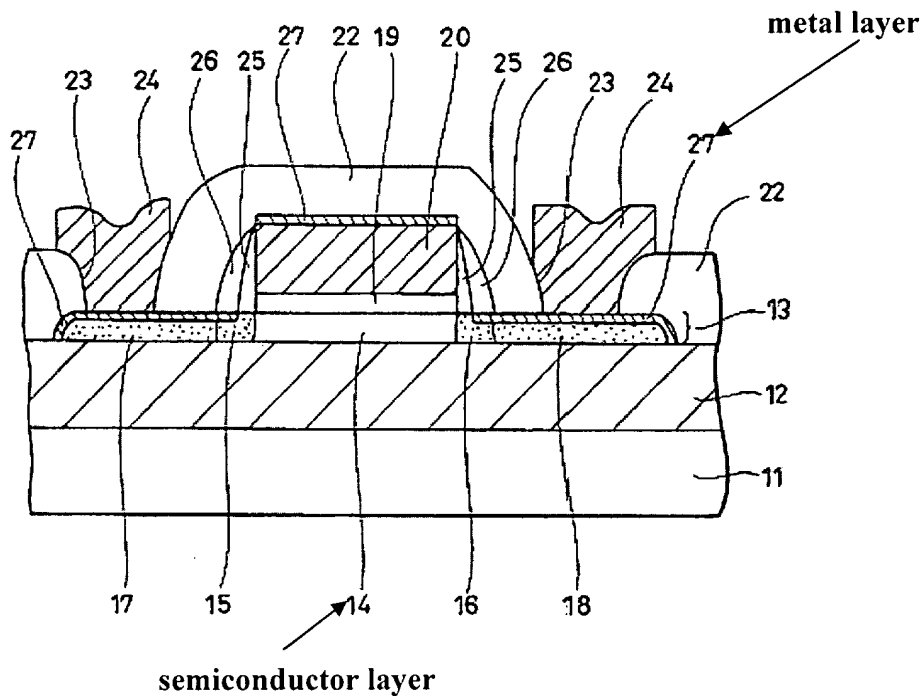
The Office Action asserts that Deleonibus discloses a semiconductor layer 42 and a metal layer 12/14. However, the metal later 12/14 does not contact the semiconductor layer as shown by Fig. 2 of Deleonibus (reproduced below). This Figure also fails to show a conductor (i.e., a metal layer) that contacts the body region (i.e., semiconductor layer).



Yamaguchi et al. disclose a metal layer 27 (as defined by the Office Action), but the metal layer 27 does not contact a semiconductor layer 14 (as defined by the Office Action), as shown by

Fig. 5 of the reference, reproduced below. This Figure also fails to show a conductor (i.e., a metal layer) that contacts the body region (i.e., semiconductor layer).

FIG. 5



As admitted by the Office Action, Koh, Imai, and Gardner fail to disclose a metal layer (a conductor) that contacts a semiconductor layer (a body region). Rather, the Office Action admittedly relies upon Koh and Imai for the disclosure of extension regions contacting a gate electrode and spacers. Gardner was cited by the Office Action for the disclosure of a first sidewall spacer that is thinner than a second sidewall spacer.

Therefore, the prior art, whether taken alone or in any reasonable combination, fails to disclose or suggest the combination of elements recited in claims 23-25, 27-31, and 34, including the metal layer (conductor in claim 34) contacting the semiconductor layer (body region in claim 34). In light of this, Applicants submit that none of the prior art references applied against this application,

whether taken alone or in any reasonable combination, discloses or suggests the combination of elements recited in claims 23-25, 27-31, and 34. Thus, these claims are allowable over these references. Applicants, therefore, respectfully request the reconsideration and withdrawal of the Section 103(a) rejections of these claims. Applicants further request reconsideration of the application, and the timely allowance of the pending claims.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered, placing claims 23-25, 27-31, and 34 in condition for allowance. Applicants submit that the proposed amendments of claim 34 do not raise new issues or necessitate the undertaking of any additional search of the art, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action.

Furthermore, Applicants respectfully point out that the final action presented some new arguments as to the application of the art against Applicants' invention. It is respectfully submitted that the entering of the Amendment would allow the Applicants to reply to the final rejections and place the application in condition for allowance.

Finally, Applicants submit that the entry of the amendment would place the application in better form for appeal, should the patentability of the pending claims still be disputed.

Application No. 09/978,528
Amendment After Final dated September 30, 2005
Reply to Office Action of June 30, 2005

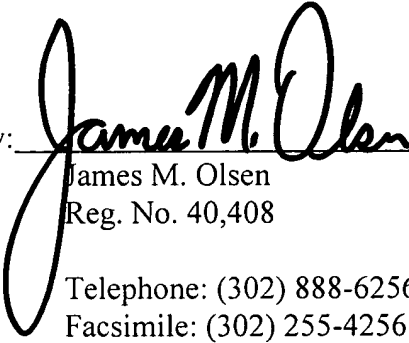
If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 03-2775. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Dated: September 30, 2005

By: _____


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